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EXAMINER	
FUREMAN, JARED	

ART UNIT	PAPER NUMBER
2876	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/684,273	WILZ ET AL.	
	Examiner	Art Unit	
	Jared J. Fureman	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *24-26 and 40* is/are allowed.

6)☒ Claim(s) *27-29,31-39 and 41-45* is/are rejected.

7)☒ Claim(s) *30* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 May 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *05/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Receipt is acknowledged of the preliminary amendment, on 5/6/2004, and the IDS, on 5/31/2005, which have been entered in the file. A reference on the IDS, U.S. Patent 5,736,482, was lined through since it is irrelevant to the present invention in that it teaches Catalysts for reducing nitrogen oxides. It appears as though this reference was cited in error. Claims 24-45 are pending.

Drawings

1. The corrected or substitute drawings were received on 5/6/2004. These drawings are not acceptable.

2. The drawings are objected to because there are two figures labeled 5A and there are two figures labeled 5B (see sheet numbers 6, 11 and 12). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

On page 14, line 12, "Fig. 6" should be replaced with --Figs. 6A and 6B--, in order to correspond with figures 6A and 6B in the drawings.

On page 18, line 25, "12B" should be replaced with --12C--, since "12B" is listed twice on page 18 and there is no description of figure 12C.

Appropriate correction is required.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

5. Claims 27-31, 40-43 and 45 objected to because of the following informalities:

Claim 27, line 5: "visible" (second occurrence) should be deleted, since it is redundant.

Claim 28, lines 3-4: due to the use of parenthesis, it is unclear as to whether the limitations within the parenthesis is intended to be part of the claimed invention or not. For examination purposes, the limitations within parenthesis have not been considered.

Claim 29, lines 3-5: due to the use of parenthesis, it is unclear as to whether the limitations within the parenthesis is intended to be part of the claimed invention or not. For examination purposes, the limitations within parenthesis have not been considered.

Claim 30, lines 3-5: due to the use of parenthesis, it is unclear as to whether the limitations within the parenthesis is intended to be part of the claimed invention or not. For examination purposes, the limitations within parenthesis have not been considered.

Claim 31, line 4: "the" (both occurrences) should be replaced with --a--, in order to avoid a lack of proper antecedent basis.

Claim 40:

Line 3, "visible" (second occurrence) should be deleted, since it is redundant.

Line 6 "the" should be replaced with --a--, in order to avoid a lack of proper antecedent basis.

Claim 41, line 6: "the" should be replaced with --a--, in order to avoid a lack of proper antecedent basis.

Claim 42:

Line 1, "the" (second occurrence) should be replaced with --a--, in order to avoid a lack of proper antecedent basis.

Lines 2 and 8-9, the phrase "e.g." renders the claim indefinite, since it is unclear as to whether the limitations following the phrase are part of the claimed invention. For examination purposes, the limitations following the phrase have not been considered.

Lines 7, "the" should be replaced with --a--, in order to avoid a lack of proper antecedent basis.

Line 8, "the" should be replaced with --a--, in order to avoid a lack of proper antecedent basis.

Claim 43, line 2: "the" should be replaced with --a--, in order to avoid a lack of proper antecedent basis.

Claim 45, line 2: due to the use of parenthesis, it is unclear as to whether the limitations within the parenthesis is intended to be part of the claimed invention or not. For examination purposes, the limitations within parenthesis have not been considered.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 27-29, 31, 32 and 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumagai et al (US 6,216,953 B1, cited by applicant) in view of Kahn et al (US 5,600,121, cited by applicant).

Re claims 27-29, 31 and 32: Kumagai et al teaches an automatically-activated bar code symbol reading device, comprising: a bar code symbol reading mechanism (light source 21, reflection mirror 26, small mirror 26', polygon mirror 22, floor mirrors 23-1 through 23-8, sensor 25) contained within a hand-supportable housing (body 1) and which is operable in two different bar code reading modes, namely: in a first bar

code reading mode, the bar code symbol reading mechanism automatically generates an omni-directional laser scanning pattern (scanning rays a, b and c, see figure 8) of substantially uniform spatial and temporal intensity for repeatedly reading one or more bar code symbols on an object during a bar code symbol reading cycle, and automatically generating a new symbol character data string in response to each bar code symbol read thereby; in a second bar code reading mode, the bar code symbol reading mechanism automatically generates a stroboscopically-pulsed omni-directional laser scanning pattern having a single laser scanning line (scan ray a, see figure 9) of substantially uniform spatial and temporal intensity for repeatedly reading one or more bar code symbols on an object during a bar code symbol reading cycle, and automatically generating a new symbol character data string in response to each bar code symbol read thereby; wherein the bar code symbol reading mechanism automatically enters the first "omni-directional" reading mode when the hand-supportable housing is placed in a support stand (see figures 62A and 62B and column 40, lines 16-33), and automatically enters the second "single-line" reading mode when the hand-supportable housing is removed from the support stand (see column 40, lines 16-33); a data transmission subsystem (circuitry within the reader body connected to cable 3, for example, see column 14 lines 22-27) in the hand-supportable housing that operates under control of control circuitry (control unit 225 in figure 38, for example) to communicate the symbol character data produced by the laser scanning engine to a host device (an external unit, not shown, see column 14 lines 22-27) operably coupled to the bar code symbol reading device; wherein the bar code symbol reading cycle is

visually signaled to the user by a bar code symbol reading state indicator (indicators 16a and 16b) provided on the scanner housing;
(also see figures 6-9, 13A-13C, 38, column 14 line 3 - column 18 line 60, column 30 lines 17-27, column 40 lines 16-33).

Kumagai et al fails to specifically teach the scanning patterns being visible scanning patterns; a manually-activated data transmission control switch that is capable of producing a control activation signal that enables communication of symbol character data to a host system in an automatic manner; a control subsystem disposed in said hand-supportable housing for enabling the transmission of produced symbol character data to the associated host system, only when a data transmission control switch provided on an exterior of said hand-supportable housing is manually actuated by the user during a bar code symbol reading cycle.

Kahn et al teaches a bar code symbol reader comprising: a hand-supportable housing (10) having a light transmission aperture (window 12) through which visible light can exit and enter the hand-supportable housing; a laser scanning engine (lasers 16 and 20, optics 18, collection optics 24, detector/array 26), disposed within the hand supportable housing, the reader selectively operating in one of first and second scan modes, the first scan mode being a fixed mode where the reader is mounted in a stand (80), the second mode being a hand-held or portable mode where the reader is picked up by the user; a data transmission subsystem (communication unit 113) in the hand-supportable housing that operates under control of control circuitry (controller 36) to communicate the symbol character data produced by the laser scanning engine to a

host device (cash register 89 and/or host computer 82, for example) operably coupled to the bar code symbol reading device; a manually-activated data transmission switch (trigger 40 incorporating dual trigger switches 70 and 71 or a single multi-position switch) integrated with the hand-supportable housing, for producing a data transmission activation control signal (for example, a signal instructing data transfer) in response to activation of the data transmission switch; the control circuitry enabling communication of symbol character data produced by the laser scanning engine in the second scan mode of operation to the host device upon occurrence of a first set of predetermined conditions including receipt of the data transmission activation control signal produced by the data transmission switch (for example, in the hand-held or portable mode, the user will actuate a switch to instruct scanning of a bar code and then actuate a switch to instruct data transfer) (see figures 1-3, column 7 lines 17-67, column 8 lines 6-30, column 9 line 51 - column 10 line 9, and column 11 lines 8-43). Kahn et al also teaches the use of a visible laser light source (see column 11 lines 1-7).

In view of Kahn et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the device and method as taught by Kumagai et al, the scanning patterns being visible scanning patterns; a manually-activated data transmission control switch that is capable of producing a control activation signal that enables communication of symbol character data to a host system in an automatic manner; a control subsystem disposed in said hand-supportable housing for enabling the transmission of produced symbol character data to the associated host system, only when a data transmission control switch provided on an

exterior of said hand-supportable housing is manually actuated by the user during a bar code symbol reading cycle, in order to allow the user to have greater control over the functions of the reading device.

Re claims 41-44: Kumagai et al teaches an automatically-activated bar code reading system comprising: a scanning element (polygon mirror 22, figure 7A and column 14, line 51) and a plurality of stationary mirrors (floor mirrors 23-1 through 23-7, figure 7A and column 14, lines 64-67) are arranged and cooperate to produce a stroboscopically-pulsed (the scanning patter as taught by Kumagai et al can be considered stroboscopically-pulsed since each scanning line is repeatedly produced in turn as the polygon mirror 22 rotates) omni-directional laser scanning pattern (scan lines E2-1 through E7-4 can be considered an omni-directional laser scanning pattern, see figure 10) against multiple rastered laser scanning lines (scan lines E1-1 through E1-3 can be considered multiple rastered laser scanning lines, see figure 10) having substantially uniform spatial and temporal intensity characteristics at a given scanning plane parallel to a scanning window (window 13a, figures 7A and 11)) within a working distance of said system; wherein the pulse frequency and width of the laser light (light source 21, figure 7A) is dynamically-controlled to selectively enable the laser light source to produce a stroboscopically-pulsed omni-directional laser scanning pattern against a single laser scanning line having substantially uniform spatial and temporal intensity characteristics at a given scanning plane parallel to the scanning window within the working distance of said system, only when the light produced therefrom is directed by said scanning element onto the predetermined subset of stationary mirrors (as

shown in figure 40, during single-scanning the laser diode is turned on while the laser beam passes through floor mirror 23-8, thus the laser diode is turned off while the laser beam passes through floor mirrors 23-1 through 23-7, to produce a uni-directional single laser scanning line exiting window 13b, as shown in figure 10. The turning on and off of the laser diode may be considered dynamically controlling the pulse frequency and width of the light source 21, see figure 40 and column 30, line 54 - column 31, line 6), to thereby support the uni-directional bar code reading mode of operation; wherein timing signals (mirror position detection signals, see figure 41) are derived and synchronized to a particular interval in the rotation cycle of a rotating light directing element when the rotating light directing element directs light produced from the laser light source onto the predetermined subset of stationary mirrors (see figure 41 and column 31, lines 7-53); wherein such timing signals are derived from a position sensor (disk-like member 222 and sensor 221, see figure 36 and column 29, lines 15-38) integrated into a rotating portion (the polygon mirror 22, see figure 36) of the rotating light directing element (also see figures 6-11, 40, column 14, line 31 - column 18, line 60).

Kumagai et al fails to specifically teach the laser source being a visible laser light source.

The teachings of Kahn et al have been discussed above.

In view of Kahn et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Kumagai et al, the laser source being a visible laser light source, in order to allow the

user to more easily align the scanning pattern or scanning line with the bar code being read, since the light is visible to the user.

8. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumagai et al as modified by Kahn et al as applied to claim 44 above, and further in view of Wike, Jr et al (US 5,719,385, cited by applicant).

Kumagai et al as modified by Kahn et al fails to specifically teach that derives such timing signals a position indicating optical element mounted adjacent the perimeter of one of said stationary mirrors, such that the position indicating optical element is illuminated by light produced from said laser light source when the rotating light directing element reaches a predetermined point in its rotation.

Wike, Jr et al teaches generating timing signals using a position indicating optical element (a position indicating reflector, see column 3, line 66) mounted adjacent a perimeter (on a facet edge, for example, see column 3, line 67) of a stationary mirror (one of pattern mirrors 16, see figure 1 and column 3, line 66 - column 4, line 6), such that the position indicating optical element is illuminated by light produced from a laser light source (laser 12, see figure 1) when a rotating light directing element (reflector 14, see figure 1) reaches a predetermined point in its rotation (see figure 1 and column 3, line 62 - column 4, line 6).

In view of Wike, Jr et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to replace the position indicating element, as taught by Kumagai et al as modified by Kahn et al, with a position indicating optical element mounted adjacent the perimeter of one of said stationary mirrors, such

that the position indicating optical element is illuminated by light produced from said laser light source when the rotating light directing element reaches a predetermined point in its rotation, since Wike, Jr et al teaches that this position sensor is an equivalent to other position sensors (see column 3, line 62 - column 4, line 6, of Wike, Jr et al).

9. Claims 33-35, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boles et al (US 4,639,606, cited by applicant) in view of Kahn et al.

Boles et al teaches an automatically-activated bar code symbol reading system comprising: (i) a hand-supportable housing (not shown, see column 3, lines 36-42); (ii) a bar code symbol reading mechanism (see figures 1-3) disposed in said hand-supportable housing and having (1) a preprogrammed set of operational states wherethrough said system automatically passes during each bar code symbol reading operation (see figures 4, 5 and column 5, line 60 - column 7, line 3), without requiring manual actuation of a switch, trigger or like component within said system; wherein the preprogrammed set of operational states includes an object detection state of operation (find paper state A, see figure 5, also see figure 4), a bar code presence detection state of operation (search state D, figure 5, also see figure 4) and a bar code symbol reading state of operation (in code state G, figure 5, also see figure 4), wherein each of these states of operation are automatically activated in response to the automatic detection of predetermined conditions in the object detection field, bar code symbol detection field and/or bar code reading field of said system; wherein the object detection is carried out using low power non-visible laser beam signaling technology (see the "TURN LASER

ON FOR 1 msec" step in figure 4) (also see figures 1-5, column 2 lines 8-11, 41-66, column 3 lines 36-43, and column 5 line 60 - column 7 line 3).

Boles et al fails to teach a preprogrammed symbol character data transmission state of operation into which said system is automatically induced in response to the manual-actuation of said symbol character data transmission activation switch provided on the exterior of said hand-supportable housing; wherein the hand-supportable bar code symbol reading device can be used as either a portable hand-supported laser scanner in an automatic hands-on mode of operation having a manually-activated data transmission state of operation, or as a stationary laser projection scanner in an automatic hands-free mode of operation having a automatically-activated data transmission state of operation; wherein a support stand is provided for supporting said hand-supportable bar code symbol reading device in its automatic hands-free mode of operation and automatically generating a data transmission control activation signal to enable the automatically-activated data transmission state in this operation mode.

Kahn et al teaches a bar code symbol reading system for carrying out bar code symbol reading operations, comprising: a manually-actuatable data transmission activation switch (one of switches 71 and 72, for example, see figures 1, 2b, 3, and column 7 lines 29-52) integrated with a hand-supportable housing (housing 10, see figures 1 and 2b); and a preprogrammed symbol character data transmission state of operation (the operational state necessary to carry out a data transmission protocol, for example) into which said system is automatically induced in response to the manual-actuation of said symbol character data transmission activation switch (see column 7

line 49); wherein the hand-supportable bar code symbol reading device can be used as either a portable hand-supported laser scanner in an automatic hands-on mode of operation having a manually-activated data transmission state of operation (see figure 2B), or as a stationary laser projection scanner in an automatic hands-free mode of operation having a automatically-activated data transmission state of operation (see figure 1); wherein a support stand (stand 80, see figure 1) is provided for supporting said hand-supportable bar code symbol reading device in its automatic hands-free mode of operation and automatically generating a data transmission control activation signal to enable the automatically-activated data transmission state in this operation mode.

In view of Kahn et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Boles et al, a preprogrammed symbol character data transmission state of operation into which said system is automatically induced in response to the manual-actuation of said symbol character data transmission activation switch provided on the exterior of said hand-supportable housing; wherein the hand-supportable bar code symbol reading device can be used as either a portable hand-supported laser scanner in an automatic hands-on mode of operation having a manually-activated data transmission state of operation, or as a stationary laser projection scanner in an automatic hands-free mode of operation having a automatically-activated data transmission state of operation; wherein a support stand is provided for supporting said hand-supportable bar code symbol reading device in its automatic hands-free mode of operation and automatically

generating a data transmission control activation signal to enable the automatically-activated data transmission state in this operation mode, in order to give the operator greater control over the operation of the scanner, thereby preventing the transmission of an erroneously scanned code, or preventing data transmission until all desired code are read, for example.

10. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boles et al as modified by Kahn et al as applied to claims 33 and 36 above, and further in view of Kumagai et al.

Boles et al as modified by Kahn et al fails to specifically teach a set of color-encoded light sources provided on an exterior of said hand-supportable housing for sequentially generating a set of visually-perceptible state indication signals that visually indicate to a user the various states of operation, wherethrough said system automatically passes during each instance of automatic bar code symbol reading.

Kumagai et al teaches a bar code symbol reading system for carrying out bar code symbol reading operations, comprising a hand-supportable housing (see figure 15A); a set of color-encoded light sources (16a and 16b) provided on an exterior of said hand-supportable housing (see figure 15B) for sequentially generating a set of visually-perceptible state indication signals that visually indicate to a user the various states of operation, wherethrough said system automatically passes during each instance of bar code symbol reading (see column 22, lines 1-10).

In view of Kumagai et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught

by Boles et al as modified by Kahn et al, a set of color-encoded light sources provided on an exterior of said hand-supportable housing for sequentially generating a set of visually-perceptible state indication signals that visually indicate to a user the various states of operation, wherethrough said system automatically passes during each instance of automatic bar code symbol reading, in order to provide feedback to the operator, thereby letting the operator know if the system is working properly. While Kumagai et al only shows two visual indicators, when combining the teachings of Kumagai et al with the system as taught by Boles et al as modified by Kahn et al one of ordinary skill in the art at the time of the invention would recognize the need to add as many visual indicators as is required by the operational states of the particular system.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 27, 29 and 31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,905,071 B2 (hereinafter the '071 patent). Although the conflicting claims are not

identical, they are not patentably distinct from each other because claim 1 of the '071 patent contain limitations that encompass the scope of claims 27, 29 and 31 of the present application. For example, claim 1 of the '071 patent recites: 1. An automatically-activated bar code symbol reading device comprising: (1) a hand-supportable housing having a light transmission aperture wherethrough visible light can exit and enter said hand-supportable housing; (2) a laser scanning bar code symbol reading engine, disposed within said hand supportable housing, that can be selectively operated in one of first and second scanning modes, wherein during said first scanning mode, said laser scanning bar code symbol reading engine projects an omni-directional laser scanning pattern through said light transmission aperture, for automatically reading one or more bar code symbols on an object during a bar code symbol reading cycle, and generating a new symbol character data string in response to each bar code symbol read thereby, and wherein during said second scanning mode, said laser scanning bar code symbol reading engine projects a single line scanning pattern through said light transmission aperture, for automatically and repeatedly reading one or more bar code symbols on an object during a bar code symbol reading cycle, and generating a new symbol character data string in response to each bar code symbol read thereby; (3) a data transmission subsystem, disposed in said hand-supportable housing, for transmitting, when activated, a selected one of said produced symbol character data strings to a host system operably connected to said automatically-activated bar code symbol reading device; (4) a manually-activatable data transmission switch, integrated with said hand-supportable housing, for generating a data

transmission control activation signal in response to the activation of said manually-activatable data transmission switch within a predetermined time period; and (5) a system controller for controlling said data transmission subsystem during said first and second scanning modes of operations, wherein during said first scanning mode, the symbol character data string, produced at substantially the same time when said data transmission control activation signal is generated, is transmitted to said host system, and wherein during said second scanning mode, the symbol character data string, produced at substantially the same time when said data transmission control activation signal is generated, is transmitted to said host system.

13. Claims 27-29, 31 and 32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3 and 28 of U.S. Patent No. 6,857,572 B2 (hereinafter the '572 patent). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 3 and 28 of the '572 patent contain limitations that encompass the scope of claims 27-29, 31 and 32 of the present application. For example, claim 1 of the '572 patent recites: 1. A bar code symbol reading device comprising: (1) a hand-supportable housing having a light transmission aperture through which light can exit and enter said hand-supportable housing; (2) a laser scanning engine, disposed within said hand-supportable housing, that selectively operates in one of first and second scan modes, wherein in said first scan mode, the laser scanning engine projects an omni-directional scan pattern through said light transmission aperture, repeatedly detects and decodes bar code symbols on objects passing through said omni-directional scan pattern, and

produces a symbol character data string representative of each bar code symbol read by said laser scanning engine during said first scan mode, and wherein in said second scan mode the laser scanning engine projects a single line scan pattern through said light transmission aperture and repeatedly detects and decodes bar code symbols on objects passing through said single line scan pattern, and produces a symbol character data string representative of each bar code symbol read by said laser scanning engine during said second scan mode, (3) a manually-activated data transmission switch integrated with said hand-supportable housing, for producing, when activated, a data transmission activation control signal in response to activation of said manually-activated data transmission switch; (4) a data transmission subsystem in said hand-supportable housing for transmitting, when activated, a selected one of said produced symbol character data strings to a host device operably coupled to said bar code symbol reading device; (5) a system control subsystem for controlling said data transmission subsystem so that the symbol character data string, produced at substantially the same time when said data transmission control activation signal is generated, is transmitted to said host device, and said system control subsystem deactivating said data transmission subsystem when said data transmission activation control signal is not being produced by said data transmission switch.

14. Claims 33-38 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 24, 25, 26, 27, 28 and 28 of U.S. Patent No. 6,857,572 B2 (hereinafter the '572 patent). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims

24, 25, 26, 27, 28 of the '572 patent contain limitations that encompass the scope of claims 33-39 of the present application. For example, claim 24 of the '572 patent recites (incorporating the base claim 1): A bar code symbol reading device comprising: (1) a hand-supportable housing having a light transmission aperture through which light can exit and enter said hand-supportable housing; (2) a laser scanning engine, disposed within said hand-supportable housing, that selectively operates in one of first and second scan modes, wherein in said first scan mode, the laser scanning engine projects an omni-directional scan pattern through said light transmission aperture, repeatedly detects and decodes bar code symbols on objects passing through said omni-directional scan pattern, and produces a symbol character data string representative of each bar code symbol read by said laser scanning engine during said first scan mode, and wherein in said second scan mode the laser scanning engine projects a single line scan pattern through said light transmission aperture and repeatedly detects and decodes bar code symbols on objects passing through said single line scan pattern, and produces a symbol character data string representative of each bar code symbol read by said laser scanning engine during said second scan mode, (3) a manually-activated data transmission switch integrated with said hand-supportable housing, for producing, when activated, a data transmission activation control signal in response to activation of said manually-activated data transmission switch; (4) a data transmission subsystem in said hand-supportable housing for transmitting, when activated, a selected one of said produced symbol character data strings to a host device operably coupled to said bar code symbol reading device; (5) a

system control subsystem for controlling said data transmission subsystem so that the symbol character data string, produced at substantially the same time when said data transmission control activation signal is generated, is transmitted to said host device, and said system control subsystem deactivating said data transmission subsystem when said data transmission activation control signal is not being produced by said data transmission switch; wherein said laser scanning engine operates in a preprogrammed set of operational states wherethrough the laser scanning engine automatically passes during each bar code symbol reading operation.

15. Claims 33 and 35-37 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 8/9 and 7 of U.S. Patent No. 6,783,075 B2 (hereinafter the '075 patent). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 8/9 and 7 of the '075 patent contain limitations that encompass the scope of claims 33 and 35-37 of the present application. For example, claim 1 of the '075 patent recites: A portable hand-supportable data terminal for allowing an operator to enter, collect, and display data, said portable hand-supportable data terminal comprising: (1) a hand-supportable housing having a light transmission aperture and being supportable within a hand of an operator; (2) an automatically-activated bar code symbol reading subsystem, integrated with said hand-supportable housing, and programmed for reading bar code symbols encoded with information, and producing symbol character data representative of said information; (3) a manually-actuated data entry device, integrated with said hand-supportable housing, for manually producing character data

representative of information manually entered into said portable hand-supportable data terminal; (4) a data storage device, disposed within said hand-supportable housing, for storing data collected by said portable hand-supportable data terminal; said automatically-activated bar code symbol reading subsystem including (2)(a) a bar code symbol reading mechanism automatically and repeatedly reading a bar code symbol on an object within a predetermined time period, and each instant said bar code symbol is read within said predetermined time period, automatically producing a symbol character data string representative of said read bar code symbol, (2)(b) a data transmission circuit, disposed in said hand-supportable housing, for transmitting, when activated, a selected one of said produced symbol character data strings to either said data storage device or a host system arranged in operable communication with said portable hand-supportable data terminal, (2)(c) a manually-activatable data transmission switch, integrated with said hand-supportable housing, for generating a data transmission control activation signal in response to the activation of said manually-activatable data transmission switch within said predetermined time period, and (2)(d) a system controller for controlling said data transmission circuit so that the symbol character data string, produced at substantially the same time when said data transmission control activation signal is generated, is transmitted to either said data storage device or said host system; a visual information display device, integrated with said hand-supportable housing, for visually displaying information collected by said portable hand-supportable data terminal; and a computing platform, disposed in said hand-supportable housing, for executing a graphical user interface (GUI) based operating system (OS) program,

Allowable Subject Matter

16. Claims 24-26 and 40 are allowed (claim 40 requires correction of the claim objections noted above).

17. Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. The following is an examiner's statement of reasons for allowance: The prior art, taken alone or in combination, fails to teach or fairly suggest: a first omni-directional bar code reading mode of operation, wherein a visible omni-directional laser scanning pattern produces multiple laser scanning lines, in combination with a second uni-directional reading mode of operation, wherein against a visible stroboscopically-pulsed omni-directional laser scanning pattern, there is produced a single laser scanning line (as recited in claim 24); a manually-actuatable data transmission control switch capable of serving the claimed dual purposes (as recited in claim 30); a visible laser light source, scanning element and a plurality of stationary mirrors arranged in a first configuration to produce a visible omni-directional laser scanning pattern in combination with wherein said visible laser light source, said scanning element and said plurality of stationary mirrors arranged in a second configuration and cooperating to produce a visible stroboscopically-pulsed omni-directional laser scanning pattern against a single laser scanning line (as recited in claim 40); in combination with the other claimed limitations as recited in the claims.

While Kahn et al teaches manually-actuatable switches (70 and 71, see figure 1, of Kahn et al) capable of performing dual purposes (see column 7, lines 40-60, of Kahn et al), the systems as taught by Kumagai et al and Kahn et al are not capable of performing the second purpose (labeled (ii) in claim 30). Thus, the dual purposes switches as taught by Kahn et al do not meet the claimed limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Belknap et al (US 6,454,169) teaches a bar code scanner including a position indicating optical element. Bridgelall et al (US 5,504,316) teaches a laser bar code scanner which generates multiple scanning patterns.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (571) 272-2391. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jared J. Fureman
Examiner
Art Unit 2876

June 26, 2005